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Minimizers in Azerbaijani from a comparative perspective

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Abstract: Azerbaijani, like many other languages, has a class of negative polarity items denoting minimal measures (along dimensions such as size, length, duration, value, weight etc.), called minimizers. This paper presents an overview of this group of expressions, compares them to minimizers in the western European languages, in particular English and Dutch, identifies the various domains in which these minimizers may be used, and discusses their distribution across polarity-sensitive contexts such as negation, conditional clauses, questions, etc. The distribution we found, on the basis of both corpus data and native speaker judgments, is very similar to that of minimizers in English or Dutch, especially when differences are factored out which are due to the fact that Azerbaijani has strict negative concord, whereas English and Dutch do not. To this end, we distinguish two types of minimizers for Azerbaijani, negated minimizers preceded by *heç bir* ‘not one’, and minimizers preceded by *bir* only.

Keywords: negative polarity, minimizers, negation, Turkic, corpus linguistics, negative concord, *even*

1 Introduction

Minimizers form a well-known class among negative-polarity items (NPIs). They have been studied from a variety of perspectives, including etymology, phraseology and lexicography (Pott 1833; de Jager 1858), semantics and pragmatics (Horn 1989, 2001; Israel 2001, 2011; Abels 2003; Eckardt and Csipak 2013; Shyu 2016), syntax (Vallduví 1994; Postma 2001; Vandeweghe 2005; Garzonio and

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Poletto 2009; Tubau 2016) and diachronic linguistics (Meillet 1912; Jespersen 1917, Croft 1991; Hoeksema 2002, 2009; Eckardt 2006; Mosegaard-Hansen 2013; Willis et al. 2013; Wallage 2016, *inter alii*). The term *minimizer* was originally coined by Bolinger (cf. Bolinger 1972, where minimizers are compared and contrasted with *diminishers*). While minimizers are said to have a *strengthening* function in combination with negation, diminishers in contrast have an *attenuating* or downtoning function. Sometimes an item has both uses, and sometimes it is specialized for one or the other use. Compare the English sentences in (1) with the ones in (2) and (3) below:

- (1) a. *I am not a bit surprised.*¹ [minimizer use: = I am not surprised at all]
 b. *I am a bit surprised.* [diminisher use: = I am somewhat surprised]
- (2) a. *I am not a whit surprised.* [minimizer use]
 b. **I am a whit surprised.* [no diminisher use for *a whit*]
- (3) a. **I am not a tad surprised.* [no minimizer use]
 b. *I am a tad surprised.* [diminisher use]

Minimizers are indefinite noun phrases, and their head nouns indicate a minimal quantity or measurement, and in some cases a small object, such as a hair or a finger, or a small action, such as a snap of the fingers or the blinking of an eyelid. Minimizers belong to a larger group of scalar expressions which denote endpoints on a scale, which also include minimizing superlatives (*the least*, *the slightest*, cf. Fauconnier 1975; Ladusaw 1979) and combinations with *even* (Karttunen and Peters 1979; Rooth 1985; Kay 1990; Hoeksema and Rullmann 2001; Schwenter 2002; Giannakidou 2007; Beaver and Clark 2009; Alonso-Ovalle 2009; Gast and van der Auwera 2010; Collins 2016).

Note that minimizing noun phrases are used in a nonliteral way, and may also have an additional literal use. For instance, not budging an inch is typically understood as not moving at all. This is the minimizer use of *an inch*. However, in the sentence *He managed to move the car an inch*, we are using the expression literally. The literal use does not require negation (though it is compatible with negation, compare: *He did not manage to move the car an inch, but he did succeed in moving it several millimeters*). In its non-minimizer use, *inch* may combine with any numeral, whereas minimizers typically have

¹ With contrastive negation, (1a) may also be used as the negation of (1b), in which case it is a diminisher:

(i) *I am not A BIT surprised, I am VERY MUCH surprised.*

either an indefinite article (*a(n)* in English) or the numeral *one*. Very rarely, languages use the low numeral *two* as well with minimizers, compare the following examples from English²:

- (4) a. *With photo-ops, it matters not two whits that it's all fake.*³
 b. *She didn't speak two words wi'out bringing in her husband's name.*⁴
 c. *Yes, I dare swear she won't care two figs if I survive or not.*⁵

The class of minimizers is first and foremost a semantic class. However, some languages also show special syntactic properties for minimizers. In French, some minimizers are bare nouns, whereas other noun phrases have an obligatory determiner (cf. *pas, point, personne, rien*, cf. e.g. Mosegaard-Hansen 2013). Other languages where minimizers (in some cases) take the form of bare nouns are Catalan (Vallduví 1994), Greek (Giannakidou 1998), and Middle Dutch (Postma 2002). Another special feature is present in contemporary Dutch, where the negative determiner *geen* 'no' may optionally be followed by the inflected numeral *ene* 'one' in the case of minimizers (in particular taboo minimizers, cf. Postma 2001, but also some other ones, cf. *geen ene pepermoot* 'not one gingernut = nothing at all'). Non-minimizer noun phrases use a different expression to extend and strengthen the negative determiner *geen*, namely *enkel(e)*: *geen enkele student* 'not a single student'. Minimizers may have special internal structural properties, such as the ones listed above, but sometimes also show special features in their external syntactic distribution. For various diachronic stages of Mandarin Chinese, Chen (2015) has shown that minimizers prefer OV word order, as opposed to non-minimizing objects, which prefer VO.

The syntactic expression of minimizers, like that of indefinites in general, may be classified cross-linguistically according to the scheme proposed in Van Alsenoy and van der Auwera (2015): indefinites may be negative polarity items (like English *anything, any students*), inherently negative (English *nothing, no students*), or neutral (*students, a student*), and negation may be expressed on the verb (head marking), on the indefinite object or subject (dependent marking), or on both (negative concord). English minimizers

² For comparable Dutch data, cf. Hoeksema (2002: 111). In Azerbaijani, we have not been able to find any cases with the numeral *two*, but see example (21) below for a case with the numeral 5.

³ <http://demandrealjournalism.com/tv-and-politics/>

⁴ Elizabeth Gaskell, *Sylvia's lovers* (1863).

⁵ Fiona Hill, *The Stanbroke Girls*. New York 2014 (1st ed. 1981).

typically have head marking (as in *I can't see a thing*, with negation on the auxiliary verb), and occasionally also dependent marking in the form of constituent negation: *Not a word was said all evening*. Negation involving *no* on the minimizer itself is odd (compare 5c below), in spite of the fact that it is quite common with other (non-minimizer) nouns (cf. Tottie 1991 for some discussion), compare (5d):

- (5) a. *They didn't say a word.*
 b. *They said not a word.*
 c. *??They said no word.*
 d. *They have no students.*

In Dutch, on the other hand, the typical pattern is the one that is bad in English (but early modern Dutch is more like English, cf. Hoeksema 2002):

- (6) *Ze zeiden geen woord.*
 they said no word
 'They didn't say a word.'

Negative concord patterns with minimizers are found in many languages as well. Tsurska (2009: 88) cites cases from Russian, such as:

- (7) *Mne etogo ni kapli ne xotelos'!*
 to me this not drop NEG want.PAST
 'I didn't want this one bit.'

Given what was said above, namely that minimizers form a semantically defined class of expressions denoting scalar endpoints (at the low end of the scale), but may exhibit special syntactic properties, the conclusion seems inevitable to us that the licensing of minimizers is an interface phenomenon, in which syntactic and semantic factors come together. In other words, we reject approaches which want to treat minimizers in strictly semantic terms, as well as approaches which treat them as purely syntactic entities. In particular, we want to stress that minimizers are only partially motivated semantically, as shown by the fact that some candidates can be used both as minimizers and as diminishers, some as either minimizer or diminisher, and some as neither. For instance, *a word* is a common English minimizer, but *a morpheme* is neither a minimizer nor a diminisher. This cannot be explained on the basis of the meaning of *morpheme* (whether defined as 'minimal meaningful unit' or 'minimal grammatical unit'), nor straightforwardly on the basis of its being a learned

word. Similarly, *a thing* is a common minimizer in English (*He did not do a thing to help*), but the otherwise completely similar expression *een ding* in Dutch is not a minimizer (Hoeksema 2002). We therefore assume that some words with the appropriate lexical semantic properties develop into minimizers or diminishers by a process of grammaticalization (cf. also Section 3.1 below on this point, as well as Brems 2007).

In this paper, we will present an overview of minimizers in Azerbaijani, a Turkic language primarily spoken in Azerbaijan and parts of Iran (where it is usually referred to as Azeri). Using corpus data from the internet, in addition to introspective data (based on the intuitions of the first author) and published data (cf. Abdullayev 1998), we want to explore to what extent the licensing patterns of minimizers in this language resemble those of the languages of Western Europe. Our aim in doing so is a typological one. At the moment, there is a fair amount of work on minimizers in languages such as English or Dutch, but relatively little outside the family of Indo-European languages. It is therefore of interest to determine to what extent the properties of minimizers as established on the basis of work on western European languages can be extended to other language families. Our paper is structured as follows: In Section 2 we briefly describe the construction of the Azerbaijani corpus; in Section 3 we present the minimizers; in Section 4 we look at the distribution of the minimizers across the various licensing environments for polarity items; in Section 5 we compare our findings with data from Dutch and English; Section 6 presents our conclusions.

2 A note on corpus construction

Our Azerbaijani data have been collected from the Internet using the Google search engine during the first weeks of 2015. Since the Azerbaijani part of the Internet is still small and relatively recent (most entries are post-2000), compared to the English or even the Dutch part, it was possible to collect in this period only 1210 minimizer occurrences. In comparison, Google finds many more occurrences of the relatively rare English minimizer (*not*) *a whit* than all Azerbaijani minimizers put together. Presumably, this will soon change, with the arrival of social media, such as Facebook and Twitter, and the use of cell phones for communication on the Internet. A few more cases were later added to the original collection, in the course of revising this paper.

The minimizers that we collected were entered into a database and classified according to their licensing environment as well as the predicates they combine

with. In our collection, we have a number of occurrences of the expressions that we searched for that do not fit in the usual categories of contexts for polarity items. These are, in our opinion, not true minimizer occurrences, so we will mostly ignore them in our discussion. This is no different from what one will find in corpus studies of other languages (see the introduction for some discussion). For instance, English *a thing* is a minimizer in *I could not understand a thing*, but not in *Let me tell you a thing about her*. Note that noun phrases used as minimizers have a more general interpretation than in their literal interpretation. In *I could not understand a word*, the minimizer *a word* may be replaced by *anything* without loss of meaning. However, in *I understood one word*, replacing *one word* by the indefinite pronoun *something* is not semantically harmless since understanding something is also compatible with understanding a sentence, or several words. We could illustrate this point for most of the Azerbaijani minimizers to be discussed below, but we refrain from doing so for reasons of space. We submit that our corpus study requires the intuitions of a native speaker to sift the minimizer uses from the non-relevant uses, but this is a common procedure in corpus linguistics.

As is the case in other languages as well, the more idiomatic minimizers tend to be more severely restricted to polarity contexts.

3 Overview of the Azerbaijani minimizers

In this section, we present a broad overview of the Azerbaijani minimizers. Rather than giving an alphabetic listing, we present them in groups with a similar lexical-semantic background. In many of our examples there are sequences of the form *bir* minimizer *də* (= ‘one’ minimizer ‘even’). The frequent co-occurrence of minimizers with a word for ‘even’ is characteristic for minimizers in many languages, compare the frequent (and in some cases obligatory) addition of Dutch *ook maar* (cf. Hoeksema and Rullmann 2001), German *auch nur* (*ibid.*), Hindi *bhii* (Vasishth 1998), Hungarian *sem* (Surányi 2006) and Korean *-to* (Lee 1999).

A number of linguists have suggested that NPIs may be introduced by a hidden or covert operator, corresponding in meaning to *even* (cf. e.g. Lee and Horn (1994) for English *any*, Guerzoni (2006) for strong NPIs, Chierchia (2012) and Eckardt and Csipak (2013) for minimizers). We will show in our corpus study below (compare Section 5) that Azerbaijani minimizers with and without *də/da* ‘even’ share a preference for strictly negative contexts, but minimizers without it appear to have a slightly wider distribution.

3.1 Group 1: Units of language and/or speech

Speech can be divided into sounds (or in written form, in letters), syllables, and words. In English, one may use words denoting such units as minimizers, provided the verb is a verb of saying, or a verb of mental activity, e.g. *comprehend*:

- (8) a. *Don't speak a word!*
 b. *She did not whisper a sound.*
 c. *He listened without comprehending a syllable.*

In addition, names for symbols, such as *iota* or *jot*, may be used as well with a different class of verbs:⁶

- (9) a. *It matters not a jot.*
 b. *There was not an iota of truth in it.*

In Azerbaijani, *bir söz* ‘one word’, and *bir kəlmə* ‘one syllable’, may be used as minimizers:

- (10) a. *Wikileaks sən-in haqqında heç bircə kəlmə də*
 Wikileaks you-GEN about not one word even
*yaz-ma-yıb, nə vaxt-dan bəri korrupsioner ol-du-n?*⁷
 write-NEG-PP what time-ABL since briber be-PAST-2SG
 ‘Wikileaks didn’t write a word about you, how long have you been a briber?’
 b. *Quran-da reinkarnasiya mövzu-sun-da bircə söz də*
 Koran-LOC reincarnation subject-AGR-LOC one word even
*yox-dur.*⁸
 not.be-3SG
 ‘There is not one word about reincarnation in the Koran.’

⁶ The fact that *iota* and *jot* are not as transparent as *word* or *syllable* probably explains why the former two items do not have the same selection restrictions as the latter two.

⁷ This example shows negative concord, involving the item *heç* ‘not’, and the negative prefix *-ma/-mə* (the choice between these latter forms depends on vowel harmony). See Section 4 below for discussion.

⁸ The verb *yoxdur* is a special negative existential to be translated by (*not*) *have* or *be* in English.

- c. *Amma on-dan bir misra da dövr-ümüz-ə qədər də gəl-ib*
But it-ABL one verse even time-AGR-DAT to also come-PP
çix-ma-yıb.
arrive-NEG-PP
‘But even not a verse has come to our times from it.’
- d. *Bir vergül belə qoy-ul-ma-yıb, bir söz belə yazıl-ma-yıb.*
One comma even put-PASS-NEG-PP one word even write-NEG-PP
‘Even not a comma has been put, not a word has been written.’
- e. *Bun-da heç bir şübhə yox-dur, bir zərrə belə.*
this-LOC not one doubt not.be-3SG one jot even
‘There is not any doubt in it, not even a jot.’

The predicates found with *bir söz*, *bir vergül*, *bir misra* and *bir kəlmə* are typically verbs of saying/communication, such as *demək* ‘say’ and *yazmaq* ‘write’ (cf. example (10a) above), as well as more general predicates, such as the negative existential *yoxdur* exemplified in (10b). The choice of minimizers is to some extent arbitrary. E.g. in English, *a letter* is rarely used as an idiomatic minimizer but in Dutch it is fairly common to use *geen letter* ‘no letter’ as a minimizer with verbs of writing, such as *geen letter op papier krijgen* ‘not to get a letter on paper = be unable to write’ (cf. Table 1). One might say about a newspaper that it did not write a letter on some topic or other. This is understood to mean that nothing was written about the topic. On a literal interpretation, this makes no sense since letters are never ‘about’ anything, but the minimizer *letter* stands for a minimal unit of text. This point, that minimizers are chosen from a group of candidate nouns in a way that may vary somewhat from language to language or even within a language among speakers, is worth emphasizing and will be illustrated not just by unit-of-speech minimizers, but also by the classes of minimizers that are to follow.

Table 1: Minimizers which are linguistic units.

	English	Dutch	Azerbaijani
Word	+	+	+
Syllable	+	+	+
Letter	–	+	–
comma	–	–	+
jot, iota	+	+	+

3.2 Group 2: Units of distance

Units of distance expressions are most naturally combined with verbs of motion. Compare e.g. English cases such as *not budge an inch* or *not go a step further*. Another type of context for units of distance concerns measures of territory (*not an inch of our land*) in spite of the fact that these should, strictly speaking, involve squared distances, such as acres, square miles, etc. Usage patterns do not seem overly concerned with such niceties. Finally, units of distance may also be used in a metaphorical way as in *She won't give in an inch to his demands*, where it makes no literal sense to speak of distances. As the following examples illustrate, the Azerbaijani usage patterns are much the same:

- (11) *Amma öz torpağ-ımız-dan heç kim-ə bir qarış*
 But our territory-AGR-ABL nobody-DAT one inch
ver-mə-yəcəy-ik.
 give-NEG-FUT-1PL
 'But we will not give an inch of our territory to anyone.'
- (12) *Yalnız özün-ü düşün-ür-sən-sə, bir iynə ucu qədər*
 Only you-DAT think-PRES-2SG-COND one pinpoint about
irəlilə-mə-yəcək-sən.
 move.forward-NEG-FUT-2SG
 'If you only think of yourself, you will not move forward as much as a pinhead.'

3.3 Group 3: Units of weight

Expressions denoting units of weight can be used as minimizers indicating small amounts of substances, compare e.g. *There's not an ounce of fat on his lean body*. However, metaphorical extensions involving abstract notions rather than substances are common in English, as in *There is not an ounce of truth in that story*. The same can be said of occurrences such as the following:

- (13) *There is not an ounce of me that believes any of that crap.*⁹

Note that while a person may literally have ounces of flesh, the idea that these ounces may hold certain beliefs is of course nonsensical.

⁹ www.salon.com, January 4, 2013.

In Azerbaijani, a weight-based minimizer is *misqal*, an ancient Tatar unit of weight, corresponding to 4.3 gram in the metrical system. The use of ancient and no longer current units of measurement as minimizers is quite common. When a nation adopts the metrical system or changes its monetary system, it does not simultaneously update its lexicon and idioms. Dutch *Ik heb geen sou* ‘I have not a sou’ uses *sou*, the name of an ancient French coin, no longer in use in France, while *Ik heb geen duit* ‘I have not a duit’ is a minimizer expression using the obsolete Dutch coin *duit*.

We also note that the use of weight minimizers is partly in competition with other minimizers. Rather than speaking of a gram of water, Dutch speakers prefer to speak of a drop of water, or when the action is drinking, a sip of water, even though liquids, like any other substances, have a certain amount of weight. The same is true of Azerbaijani.

- (14) *və bura-da Şah İsmayıl-ın bir misqal da günah-ı yox-dur*
 And here-LOC Sjah Ismail-GEN one misqal even sin-AGR not.be-3SG
 ‘And here king Ismail does not have a misqal of sin.’
- (15) *Qoyun-lar nə bir misqal anqla-sın-lar, nə də*
 Sheep-PL neither one misqal lose.weight-VOL-3PL, nor even
kökəl-sin-lər.
 put.on.weight-VOL-3PL
 ‘Sheep should neither lose one misqal of weight, nor put on any [misqal].’

3.4 Group 4: Units of time

Units of time come in two varieties: units that allow for precise measurements, such as seconds or minutes, and units whose length is short but indeterminate, like moments. In minimizer uses they often combine with elements meaning *even*. Note that (16) below has an instance of *belə* and (17) one of *də*. Both are glossed as *even* although *belə* primarily means ‘also’ as one of our reviewers noted. In negative contexts, it expresses the meaning of *even*. The use of words meaning ‘also’ in a scalar context, where it is similar to ‘even’, is typologically not an uncommon phenomenon. Gast and van der Auwera (2011: 25) note that it is common in Slavic, as well as non-Slavic Balkan languages in scale-reversing contexts, such as negation. We may add to this that both *da/də* and *belə* have a variety of other uses that we will not discuss in this paper, e.g. ‘but’ (for *da/də*) and ‘such’ (for *belə*).

- (16) *Onlar doxsan dəqiqə ərzində bir saniyə belə*
 They ninety minute during one second even
sus-ma-di-lar.
 keep.silence-NEG-PST-3PL
 ‘During ninety minutes, they did not keep silent for even a second.’
- (17) *Tiraspolü keçə bil-mə-səydik, Azərbaycan-da*
 Tiraspol.ACC beat POT-NEG-COND.PAST.1PL Azerbaijan-LOC
bir dəqiqə də qala bil-mə-z-di-m
 one minute even stay-POT-NEG-AOR-PST-1SG
 ‘If we did not beat Tiraspol, I could not stay even a minute in Azerbaijan.’

3.5 Group 5: Units of money

Minimizers denoting minimal amounts of money, usually names of small coins, are very common. In English, *penny*, *dime*, and *cent* are the names for the smallest coins. More idiomatic minimizers are *red cent*, *plugged nickle*, *red dime*, etc. Compare:

- (18) *Anyway she boards a late night train to Paris, arrives at dawn and finds herself at the Gare du Nord with not a red cent to her name.*¹⁰

Idioms meaning ‘red coin’ appear to be very widespread. They appear in English, Dutch (*geen rooie cent* ‘no red cent’), French, German (*roter Heller*) but also Arabic (*fil aħmar*, cf. Alsarayreh 2012) and Hebrew (*pruta leforta*, cf. Sharvit 2008). In Azerbaijani the corresponding expression *qara qəpik* literally means ‘black cent’ or ‘wretched cent’. While the use of red has to do with the color of copper, copper coins traditionally being the lowest or cheapest among coins (compared to silver or gold), the use of black may indicate a negative connotation.

- (19) *Yəni indi-yə qədər fond-a daxil ol-an vəsait-lər-dən*
 So now-DAT about fund-DAT enter be-PART resource-PL-ABL
*bir manat da xərclə-n-mə-yib.*¹¹
 one manat even spend-PASS-NEG-PP
 ‘So far not a manat of the fund resources has been spent.’

¹⁰ <http://www.writing.ie/resources/love-me-or-leave-mes-claudia-carroll-on-romantic-moments/>

¹¹ The new manat is the national currency of Azerbaijan, valued at about 55 US dollar cents (January 2017).

- (20) *İnan-in, mən program-lar-dan qara qəpik də al-mı-ram.*
 believe-2PL I program-PL-ABL black cent even get-NEG-1SG
 ‘Believe me, I do not get even a red cent from the programs.’
- (21) *Beş qəpik pul-u yox-dur, danışmağ-ı-n-a bax.*
 five cent money-GEN not.be-3SG speech-POSS3-JOIN-DAT look
 ‘Look at his speech, he doesn’t have a dime to his name.’

The example in (21) is a rare case of a minimizer with another numeral than *bir* ‘one’.

3.6 Group 6: Small quantities and objects

Expressions denoting small objects and quantities are common minimizers. Many languages have minimizing words meaning a single bite, such as English *bit*, Dutch *beetje*, German *bisschen* and likewise *sip* and *drop* for liquids. Words denoting insignificant objects may likewise be used as minimizers, e.g. *straw*, *kernel*, *hair*, etc.

- (22) *Bil-ir-əm ki, o, bir tikə də ye-mə-yib.*
 know-PRES-1SG that he one bite even eat-NEG-PP
 ‘I know that he has not eaten a bite.’
- (23) *Qırmızı donanma ingilis-lər-ə Azərbaycan-dan heç bir çöp*
 red fleet English-PL-Dat Azerbaijan-ABL any one straw
də apar-ma-ğa macal ver-mə-di.
 even take-PART-DAT chance give-NEG-PAST
 ‘The Red Fleet did not give the English a chance to take even a straw from Azerbaijan.’

3.7 Taboo word minimizers

Swear words or taboo-related terms can be used in various sorts of strong language, such as verbal abuse, maledictions, curses, etc., but also as adverbs of degree, pejorative markers, strengtheners of questions (Pesetsky 1987; Den Dikken and Giannakidou 2002) or negative polarity items (Napoli and Hoeksema 2009). In English, taboo words such as *shit*, *squat* or *dick* have a special use as minimizers (cf. Postma 2001; Horn 2001; Hoeksema 2002, 2009; Postal 2004; De

Clercq 2011; Collins and Postal 2014; Sailor 2017) as well as more complex expressions such as *a damned thing*, *a damn word*, etc., which involve swear words such as *damned*. We would argue that the strengthening effect of taboo terms does not lie in the fact that they indicate a scalar endpoint better than non-taboo words but in the fact that they are emotionally charged. They tend to be restricted to informal language. We do not know how widespread the use of minimizers of taboo origin is especially since traditional grammars tend not to dwell on this type of language. For Dutch, Hoeksema (2002) noted that taboo minimizers are a relatively recent phenomenon: until the end of the eighteenth century, this group did not appear to exist at all (even in texts where rude language is otherwise abundant) and most taboo minimizers currently used do not go back more than 150 years or so. The same is true of English and German, so the emergence of taboo minimizers might well be a so-called *Sprachbund* phenomenon, arising out of intensive language contact.

In Azerbaijani, the use of taboo terms as minimizers is attested as well. In particular, the expressions *pox* ‘shit’ and *zibil* ‘crap’ may be used in a way largely analogous to English *shit* or *squat* in informal, rather rude, language. Note that whereas in English, the group of words that behave like *shit* (Collins and Postal 2014 call this the *jack* class of polarity items) are mass nouns occurring without articles, the minimizer use of *pox* in Azerbaijani seems to require the presence of *bir*. In literal uses, where *pox* is not a minimizer, the article *bir* is not used (compare [24] below with [25], a literal, non-minimizer example).

- (24) *Yanğınsöndürən-lər bir pox-a yara-ma-dı-lar*
 firefighter-PL one shit-DAT be.suitable.for-NEG-PAST-3PL
 ‘The firefighters did not help a shit.’ (= did not help one bit)
- (25) *Qaranlıq-da yolu keçər-kən ayağ-ım pox-a*
 darkness-LOC way.ACC cross-CV foot-GEN.1SG shit-DAT
bat-dı
 step-PAST.3SG
 ‘My foot stepped on shit while crossing the street in the dark.’
- (26) *Smartfon-unuz var, bir zibil başa düş-mə-sə-z*
 smartphone-AGR2PL have one crap understand-NEG-COND-AOR
də, instaqram-a mənasız şəkil-lər yüklə-yir-siniz
 also Instagram-DAT meaningless photo-PL upload-PRES-2PL
 ‘[You] have smartphones, even if you understand not a crap, you upload meaningless photos to Instagram.’

In Turkish, the word *bok* ‘shit’ is similarly used as a minimizer. Unlike its English counterparts of the *jack* class, Azerbaijani *pox* may be combined with a word meaning *even*, compare:

- (27) a. *Ed did not say (so much as) a word all evening.*
 b. *Ted did not (even) lift a finger to help.*
 c. *Ned did not (*even) do (*even) shit to help.*
 d. *Fred did not tell us (*so much as) shit.*
- (28) *Əl-inin altında hər şey var, amma ki, bir pox da*
hand-POSS.3SG under everything have but that one shit even
yeyəbil-m-ir.
eat.POT-NEG-3SG
 ‘He has everything in his hands, but he cannot do shit/anything.’

It is quite conceivable that this difference is connected to the fact that *pox* is preceded by a determiner, making it syntactically more similar to English minimizers with determiners, such as *a word* or *a whit*, rather than to the semantically related *jack* class.

One of the special properties of the *jack*-class, noted by Collins and Postal (2014), is that they do not permit long-distance licensing (from a higher clause) except in NEG-raising contexts. Compare the following examples (cf. Collins and Postal 2014: 83):

- (29) a. *Andrea doesn’t believe that Carl said jackshit about compilers.*
 b. **Andrea doesn’t accept that Carl said jackshit about compilers.*

Note that both examples are fine when *jackshit* is replaced by *anything*:

- (30) a. *Andrea doesn’t believe that Carl said anything about compilers.*
 b. *Andrea doesn’t accept that Carl said anything about compilers.*

For Azerbaijani minimizers, a similar restriction holds, as the following examples with the non-NEG-raising verb *bilmək* ‘know’ suggest.¹² While (31a) with local negation is fine, (32b) with negation in the higher clause is not, unlike (32c), which is fine, since it has a NEG-raising predicate (*düşünmək*).

¹² The status of *know* with regard to NEG-raising in English is somewhat more complicated due to the presence of nonfactive *know* (Horn 2014). For discussion, see also Collins and Postal (2017). We will not explore the notion of factivity for Azerbaijani in any depth here.

- (31) a. *Amma bil-ir-əm ki, bir pox da ol-ma-yacaq*
 but know-PRES-1SG that one shit even be-NEG-FUT.3SG
 ‘But I know that nothing will come of it.’
 b. **Amma bil-m-ir-əm ki, bir pox da ol-ar*
 but know-NEG-PRES-1SG that one shit even be-FUT.3SG
 ‘But I don’t know that anything will come of it.’
 c. *Amma düşün-m-ür-əm ki, bir pox da ol-ar*
 but think-NEG-PRES-1sg that one shit even be-FUT.3SG
 ‘But I don’t think that anything will come of it.’

We note here that in Turkish, negated matrix verbs and factive matrix verbs are incompatible with *ki*-clauses (cf. Kesici 2013; Griffiths and Güneş 2014), unlike in Azerbaijani. There is a good deal of evidence that Azerbaijani *ki*-clauses are subordinate clauses, whereas Turkish *ki*-clauses constitute an instance of parataxis. Halpert and Griffith (to appear) argue this point at some length using evidence from quantifier binding, scoping under negation, and various other phenomena to contrast Azerbaijani and Turkish *ki*-clauses. Examples such as our (31c) show that we can add polarity licensing to this list.

4 Negative and non-veridical contexts

Minimizers show up in a variety of contexts, just like other NPIs (cf. e.g. Ladusaw 1979; Linebarger 1980; van der Wouden 1997; Israel 2011) but tend to cluster more strongly in one context: direct negation (Hoeksema 2002; Giannakidou 2011). Other contexts, such as questions, conditionals, restrictions of universal quantifiers, etc. are attested as well but appear less prominent than is the case for wide-spectrum polarity items such as English *any*, German *jemals* ‘ever’ or modern Greek *kanenas*. Negation is usually clause-mate negation, but higher negation in the matrix clause with the minimizer in a subordinate clause is possible as well as the following example shows:

- (32) *O düşün-m-ür ki, biz torpağ-ımız-dan bir qarış da*
 he think-NEG-PRES.3SG that we land-AGR-ABL one inch even
ver-ər-ik.
 give-AOR-1PL
 ‘He does not think that we will give even one inch of land.’

In this respect, there is no difference with English or German, compare:

- (33) a. *I don't think he will lift a finger to help.*
 b. *They don't believe it will matter one jot.*
 c. *Do not suppose that there is a shred of evidence supporting your claim.*
- (34) *Ich glaube nicht dass er ein Wort verstanden hat.* [German]
 I believe not that he one word understood has
 'I don't believe he has understood one word.'

When the minimizer is preceded by the negation element *heç*, however, there must be local negation on the verb, compare (35a), where there is only higher negation and (35b), with local, that is clause-mate negation, below:

- (35) a. **O düşün-m-ür ki, biz torpağ-ımız-dan heç bir*
 he think-NEG-PRES.3SG that we land-POSS.1PL-ABL not one
qanş da ver-ər-ik.
 inch even give-AOR-1PL
 'He does not think that we will give even one inch of land.'
- b. *O düşün-ür ki, biz torpağ-ımız-dan heç bir qanş da*
 he think-PRES.3SG that we land-AGR.1PL-ABL not one inch even
ver-m-ər-ik.
 give-NEG-AOR-1PL
 'He thinks that we will not give even one inch of land.'

The contrast between (32) and (35a) is due to the fact that Azerbaijani has negative concord. Note that (35b) does not have a double negation reading in which the two negations cancel out to yield an affirmative result, but only a negative reading. The negative element *heç* requires a negative suffix on the verb. In this respect, the pattern in (35b) is similar to what we find in Middle Dutch, where minimizers are often preceded by the negation element *niet* 'not' and the verb is preceded by a negative clitic (cf. e.g. van der Horst and van der Wal 1979; de Haan and Weerman 1984; Burridge 1993; Hoeksema 1997, 2014; Zeijlstra 2004). Here, too, we speak of negative concord, and the main relevant difference with Azerbaijani is that Azerbaijani uses a negative suffix and Middle Dutch a negative proclitic to express the concord relation between the verbal head and the negative element. Compare:

- (36) *Het en scaedt mi niet een boone*¹³ [Middle Dutch]
 it NEG hurts me not a bean
 'It does not hurt me one bit.'

¹³ *Antwerpsch Liedboek* [1544], anonymous collection of songs, 305.

Progovac (1994) suggests for similar data in Turkish, involving the negative element *hiç*, the counterpart of Azerbaijani *heç*, that it involves a polarity item which can only be licensed by negation. We propose instead that *heç/hiç* is not licensed by negation but is itself an exponent of negation and agrees with the verb. Since most types of concord are typically clause-bound, negative concord is clause-bound as well. The fact that Turkish *hiç* is not licensed by contexts which otherwise license polarity items, such as conditionals, need not be stipulated in such an account but is directly predicted. Since *hiç* is itself inherently negative, it need not be licensed but it must exhibit concord with the verb, similar to (36) above. Hence a conditional clause without negation is not a good host for *hiç*. The same is true for other licensing contexts that are not clause-mate sentential negation.

We build the case for treating *heç/hiç* as inherently negative on a number of facts. First of all, *heç/hiç* may appear by itself or with a pronoun to form a negative answer. In this respect, it differs from English NPIs such as *ever* or *anything*, which cannot appear as short answers (Giannakidou 2000), compare (a) with (b, c):¹⁴

- (37) (a) Q: *Bugün ne yap-tı-n?* [Turkish, van Schaaik 1994: 47]
 today what do-PAST-2SG
 ‘What did you do today?’
 A: *Hiç.*
 Nothing.
 (b) Q: *When did you visit Baku?*
 A: *#Ever.*
 (c) Q: *Who did you meet?*
 A: *#Anybody.*

Second, an additional property that singles out *heç/hiç* indefinites as inherently negative involves the use of approximative adverbs. This test, originally due to Horn (1972), distinguishes polarity items (and indefinites more generally) from negative and universal quantifiers:

¹⁴ A complication for our account is that *hiç* may be used with the meaning *ever* in questions, i.e. without negative import:

- (36) *Türkiye’ye hiç gittin mi?* [Turkish, van Schaaik 1994]
 Turkey.DAT ever go.PAST.2SG
 ‘Did you ever go to Turkey?’

We must assume polysemy to account for such cases, which are not, however, unheard of in other languages. Italian *nessuno*, for instance, also has a nonnegative interpretation in questions (Zanuttini 1991).

- (38) a. *Jones met almost nobody.*
 b. *Jones met almost everybody.*
 c. **Jones met almost somebody.*
 d. **Jones didn't meet almost anybody.*
 e. **Jones never met almost a living soul.*

Using this test (which is not perfect but statistically robust (cf. Hoeksema 2011), we show that Azerbaijani *heç* + minimizer patterns like *nobody*, whereas the minimizer without *heç* patterns like *anybody/somebody*:

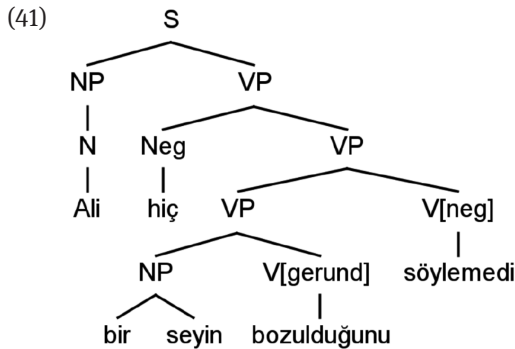
- (39) a. *Qəhvə-nin ürəy-ə təxminən heç bir damcı da xeyr-i*
 coffee-GEN heart-DAT almost not one ounce even benefit-POSS3
yox-dur.
 not.be-3SG
 'Coffee does not benefit the heart, almost not even one bit.'
 b. **Qəhvə-nin ürəy-ə təxminən bir damcı da xeyr-i*
 coffee-GEN heart-DAT almost one ounce even benefit-POSS3
yox-dur.
 not.be-3SG
 'Coffee does not benefit the heart almost one bit.'

Now we would like to point out another aspect of Progovac's account of Turkish, which is also relevant for the analysis of Azerbaijani. In (32) and (35a,b) above, we made use of a finite subordinate clause (CP) introduced by *ki* to show that concord is restricted to that clause. This is the construction that most resembles *that*-clauses in English. However, Turkish and Azerbaijani also make use of a gerund-like type of complement. One of Progovac's (1994: 89) Turkish examples is:

- (40) *Ali hiç bir şey-in bozul-duğ-u-nu söyle-me-di* [Turkish]
 Ali not one thing-GEN breakdown-GER-3SG-ACC say-NEG-PAST
 'Ali did not say that anything broke down.'

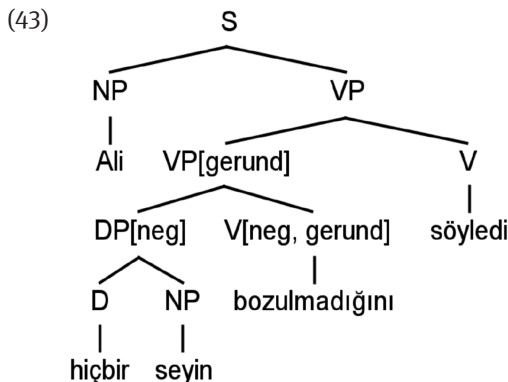
This sentence seems to involve concord between an element of the embedded gerund and the matrix verb, violating the clause-bound nature of negative concord. We assume that such sentences are not exceptional since we interpret the negation element *hiç* as a VP modifier, as in (41). We assume that the neg-feature associated with *hiç* enters a concord relation with the neg-feature associated with the verb *söylemedi*. We assume that neg-features percolate up the tree until they enter into a sister relation with another neg-bearing node. We do not postulate a NegP for this agreement relation, to keep matters maximally

simple, but a NegP analysis such as e.g. the one in Ouhalla (1993) for Turkish, will do as well. We assume that the feature at the verb is uninterpretable and will be checked against the interpretable feature associated with *hiç* (along the lines of Zeijlstra 2004), and conform our hypothesis that *hiç* is inherently negative, not an NPI. Since the details of negative concord are not our main concern in this paper, nothing much hinges on the presence of NegP.



When *hiç* is directly combined with the minimizer *bir şeyin*, which in Turkish orthography requires that the words *hiç* and *bir* are written together as one word, we get the sentence in (42) below with a structure as in (43) with local negative concord on the gerund verb.

- (42) *Ali hiçbir şey-in bozul-ma-dığı-ı-nı söyledi* [Turkish]
 Ali not.one thing-GEN breakdown-NEG-GER-3SG-ACC say.PAST
 ‘Ali said that nothing broke down.’

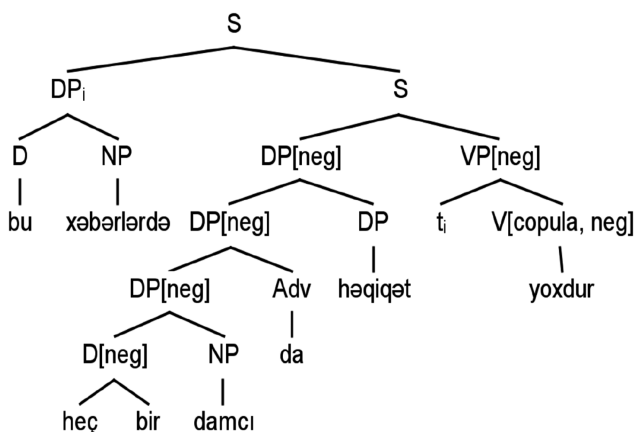


The two structures are prosodically differentiated, but we will not explore that aspect in this paper. For us, the main thing to note is that both (41) and (43) can be analyzed as involving local negative concord between members of the same clause.

Given that Azerbaijani, like Turkish, expresses sentential negation by different means in copular constructions and existential sentences, any account in terms of concord must extend to these cases as well. We assume that the negative copula and the negative existential contribute the same NEG feature as the negative suffix for agreement purposes as depicted in the two tree diagrams below. The precise status of the genitive *müəllimlərin* in (45), in particular the question from which lower position in the clause it is derived, we will leave open, as being orthogonal to our concerns.

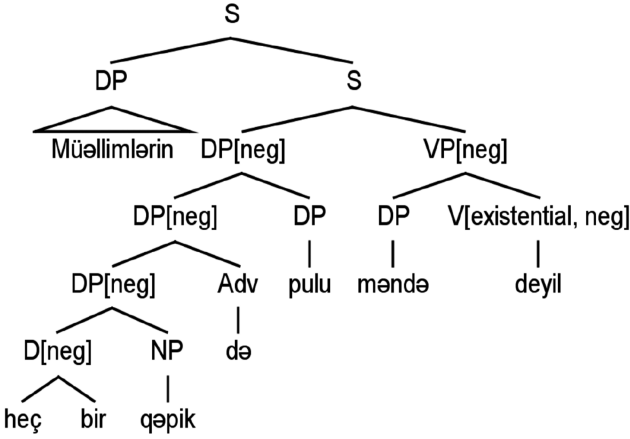
(44) Example with *yox*

Bu xəbər-lər-də heç bir damcı da həqiqət yox-dur [Azerbaijani]
 this news-PL-LOC not one jot even truth not.be-3SG
 ‘There is not one ounce of truth in this news.’



(45) Example with *deyil*

Müəllim-lər-in heç bir qəpik də pul-u mən-də deyil.
 teacher-PL-GEN not one cent even money-POSS I-LOC NEG.3SG
 ‘I don’t have a penny from the teachers.’



5 Distribution across licensing contexts

As we mentioned above, some minimizers may also be found in positive sentences with a non-minimizer meaning, similar to English *an inch, a word*. Leaving aside such cases, we noted for our Azerbaijani material the following distribution across licensing contexts (we note that percentages above 1% were rounded off, and we split the data between cases with and without the scalar elements *da/də* ‘even’):

Table 2: Minimizers and their contexts (Azerbaijani internet data).

Context	N	%	+ <i>da</i> /– <i>də</i>	%	– <i>da</i> / <i>də</i>	%
Negation	793	85	471	91	322	80
Comparative	12	1	1	0.2	11	3
Conditional	68	7	22	4	46	11
Interrogative (WH and yes/no)	56	3	17	3	39	5
Subjunctive	4	0.4	1	0.2	3	1
Sarcasm	2	0.2	2	0.4	–	–
Superlative	1	0.1	1	0.2	–	–
Total	936	100	515	100	421	100

Note that the cases marked with *da/də* tend to concentrate more strongly in strictly negative contexts than minimizers without these scalar operators (cf. Table 2). We are not sure why there should be such a difference but note that it is not expected for those who assume that all minimizers (and perhaps all NPIs) are marked by an overt or hidden operator meaning *even* (e.g. Chierchia 2012; Eckardt and Csipak 2013, among others, and see Giannakidou and Yoon 2016; for a critical discussion of the role of scalarity in general in theories of polarity licensing). If the occurrences without *da/də* have a covert occurrence of *even*, there should be no difference between these cases. (All differences, except for the last three contexts, where the numbers are simply too low, are statistically significant, with $p < 0.01$ using Fisher's Exact Test.)

We illustrate the various possibilities for Azerbaijani minimizers with the following made-up sentences (reflecting the grammaticality judgments of the first author):

(46) a. Subjunctive

Bircə kəlmə de-y-ə bil-sə-y-di-m!
 one word say-Part be.able-SUBJ-PAST.1SG
 'If only I could say a word!'

b. Conditional clause

Bir söz de-s-əm, mənə rüsvay ed-ər-lər.
 one word say-COND-1SG me disgrace make-FUT-3PL
 'If I say one word, they will disgrace me.'

c. WH-question

Devalvasiya-dan sonra kim kim-ə bir qəpik borc ver-ər?
 devaluation-ABL after who who-DAT one cent lend.give-AOR.3SG
 'After the devaluation, who would lend a cent to anyone?'

d. YES/NO question

Bir çürük qoz-a dəy-ər-mi?
 one rotten nut-DAT cost-SUBJ-QM
 'Will it cost a damn thing?'

e. Comparative

Bir qəpik vermək-dən-sə bir ton yalan danış-ər
 one cent give-PART-AFF one ton tell.lies-AOR.3SG
 'He would tell a ton of lies rather than giving one cent.'

Azerbaijani does not have a preposition meaning *without* that could function as a licenser for minimizers. However, it has the suffix *-sız* (which has 4 allomorphs, depending on vowel harmony), which has a somewhat comparable

function (it could also be compared to the English suffix *-less*). This suffix may license minimizers, although our corpus material did not contain any cases. An example to illustrate this possibility is:

(47) Negative suffix *sız*

O bu iş-i bir qəpik-siz gör-dü
 he this work-ACC one cent-LESS do-PAST.3sg
 'He did this work without a penny (for free).'

The use of *without*-like elements varies quite a bit, both between languages and within a language. For instance, English almost invariably uses this context less than Dutch, and in Dutch there is a big difference between the minimizer *een woord* 'a word', which appears in 17% of its occurrences in a PP headed by *zonder* 'without', as opposed to most other minimizers (Hoeksema 2002). In part, this may be due to alternative ways of expressing content. In English and Azerbaijani, there are common alternatives to a PP like *without saying a word*, namely negated gerunds or participles: *not saying a word* (Azerbaijani: *bir söz demədən*), which in Dutch is only possible in archaic language: *geen woord zeggende* 'no word saying = not saying a word').

Another category that we did not find attestations of, but which may serve as a host for polarity items, is the complement of a negative (or adversative) predicate. In English such complements may be noun phrases (*deny any responsibility*), prepositional phrases (*refrain from any action*), a finite clause (*deny that he was in any way surprised*), an infinitival complement (*forbid to enter any of the rooms*) or a gerund (*deny ever having been to Murmansk*). In Azerbaijani, it is possible to embed minimizers in gerunds that are complements of negative verbs:

(48) Complement of negative predicate

Bir kəlmə de-di-yi-ni dan-dı.
 one word say-PAST-GER-ACC deny-PAST.3SG
 'He denied saying one word.'

In Azerbaijani, negative predicates do not combine with finite *ki*-clauses in general. The only clause-like complements for such predicates that sound natural are gerunds. So we cannot provide cases of minimizers in *ki*-clauses that are licensed by negative matrix predicates, but this is not a fact about polarity items but rather a general property of negative matrix predicates.

As for minimizers that directly combine with a transitive verb, it was already noted in Progovac (1988, 1994) in connection with Serbo-Croatian

polarity items that such combinations are either downright impossible or much more restricted than cases where polarity items are embedded in a larger complement (but some of the weaker polarity items, such as Dutch *enig*+singular count noun are OK as objects of transitive negative predicates [Klein and Hoeksema (1995)]. However, minimizers are not in this class of less restrictive NPIs. In Azerbaijani, for example, (as in English, compare the oddness of the translation), the following sentence sounds much worse than the comparable sentence in (48) (unless a literal, non-minimizer interpretation is intended):

- (49) **Bir kəlmə-ni dan-dı*
 one word-ACC deny-PAST.3SG
 'He denied one word.'

However, we managed to come up with one case that seems acceptable:

- (50) *O rüşvət-in bir qəpiy-in-dən imtina ed-ər*
 he bribe-GEN one cent-AGR-ABL refusal make-FUT.3SG
 'He will refuse a cent of bribe.'

Yet other contexts for polarity items are provided by restrictive adverbs such as *only* and *hardly* (Horn 1969, 2002, 2009; Atlas 1997; von Stechow 1999; Giannakidou 2006). In Azerbaijani, the counterparts may also license minimizers. We offer the following examples:

- (51) *Güclə bir söz deyə bil-di-m*
 hardly one word say POT-PAST-1SG
 'I could hardly say a word.'
- (52) *Təkcə o, bir söz deyə bil-di*
 only she one word say POT-PAST.3SG
 'Only she could say a word.'

Non-veridical *before*-clauses were noted by a number of people as hosts for negative polarity items, e.g. Landman (1991), and Sánchez Valencia et al. (1994). In Azerbaijani, *before*-clauses require a negative suffix on the verb. However, we consider this suffix to be semantically superfluous as it is in other languages, e.g. German (cf. Krifka 2010) or French (Gaatone 1971). Hence the licensing of minimizers is to be attributed to the *before*-operator.

- (53) *Bir qarış da torpağ-ım-ı kimsə-yə ver-mə-miş-dən əvvəl*
 one inch even land-AGR-ACC anyone-DAT give-NEG-PP-ABL before
öl-sə-m yaxşı-dır.
 die-CONJ-1SG good-3SG
 'I prefer to die before giving even an inch of my land to anyone.'

Another type of temporal adverbial clause which may host polarity items is provided by *as soon as*-clauses. In Azerbaijani, such clauses may contain minimizers, compare:

- (54) *O qadın-a bir qəpik xərclə-yən kimi səni*
 that woman-DAT one cent spend-PART as.soon.as you.ACC
övladlıq-dan rədd ed-ər-əm.
 child-ABL disown make-FUT-1SG
 'I will disown you as my child as soon as you spend a cent on that woman.'

Restrictions of universal quantifiers form yet another context, as in English, Dutch and other languages:

- (55) *Bu haqda bir söz də dey-ən hər kəs cəzalan-dır-il-acaq.*
 this about one word even say-PP everyone punish-PASS-FUT-3SG
 'Everyone will be punished who says even a word about this.'

Restrictions of superlatives: Minimizers in the restriction of a superlative are not attested in English or in Dutch. The following two examples illustrate a difference between superlatives and *the only* in this regard (cf. Hoeksema 2013 for some discussion of differences between *the only* and superlatives). While superlatives are no good as hosts, *the only* is much better:

- (56) a. **The worst/best student who said a syllable about it is John.*
 b. *The only student who said a syllable about it is John.*

In this regard, Azerbaijani shows a similar pattern of judgments:

- (57) *Bu haqda bir söz belə deyə bil-ən ən yaxşı tələbə Arif*
 this about one word even say POT-PART most good student Arif
ol-du.
 be-PAST.3SG
 *'The best student who said even syllable about it was Arif.'

- (58) *Bu haqda bir söz belə deyə bil-ən tək tələbə Arif*
 this about one word even say POT-PART only student Arif
ol-du.
 be-PAST.3SG
 ‘The only student who could say even a word about it was Arif.’

Restrictions of *the first* (*ilk* in Azerbaijani) and *the last* (*son* in Azerbaijani) pattern in this regard with English *the only*, permitting the use of minimizers in their restriction, as opposed to superlatives, which fail to license minimizers.

- (59) The first:
Qarabağ haqda bircə söz də olsa yaz-an ilk şair
 Karabakh about only one word even even write-PP first poet
ol-maq-dan qürur duy-ur-am
 be-GER-ABL proud feel-PRES-1SG
 ‘I am proud to be the first poet to write even one word about Karabakh.’

- (60) The last:
Bu sənə bir damcı olsa ən son köməy-im ol-sun.
 this you.DAT one bit even most last help-1SG be-VOL.3SG
 ‘It may be the very last time I help you even one bit.’

Downward-entailing quantifiers such as *few* and *little* in English, or their counterparts *weinig* (Dutch) and *wenig* (German), occasionally license polarity items, including minimizers, e.g. *The world has little reason to care a jot about Justin Bieber* (pace Eckardt and Csipak 2013: 276). In the following example, we show that the same is true for Azerbaijani:

- (61) *Çox az insan tap-ıl-ar ki, belə bir mənasız film-ə*
 very few people find-PASS-SUBJ that such one stupid film-DAT
bir qəpik də ol-sun xərclsin.
 one cent even be-IMP.3SG spend.SUBJ.3SG
 ‘Very few people can be found that would pay even one cent for such a stupid film.’

In the literature on negative polarity, quantifiers such as *few*, *little*, but also *hardly*, are classified as weak triggers, as opposed to negation and *n*-words, which are considered to be strong triggers. The difference between the

two types is a semantic one, having to do with the fact that *n*-words and negation (among others) have the property that a disjunction in their scope is equivalent to a conjunction in which the negative operator is distributed over both conjuncts (Zwarts 1998 calls this property *anti-additivity*), unlike *few*, *little* and *such*, which entail (but are not entailed by) such a conjunction (Zwarts 1986, 1998; van der Wouden 1997). In (62a), we give an example of a valid biconditional, and in (62b) we define the notion of anti-additivity in semantic terms:

- (62) a. *Nobody ate or drank* \leftrightarrow *Nobody ate and nobody drank*.
 b. A function *f* is anti-additive if and only if $f(A \cup B) \equiv f(A) \cap f(B)$

- (63) *Few of us ate or drank* \rightarrow *Few of us ate and few of us drank*.

Note that the inference in (63) is invalid from right to left, because it might be the case that the number of eaters is small, and the number of drinkers as well (in which case the right-hand sentence is true), but the number of people who ate or drank might not be considered small (and so the left-hand sentence would be false in that case). Zwarts (1986, 1998) proposes that some polarity items are licensed only by strong triggers whereas others are also triggered by downward entailing triggers. The former are called strong NPIs in Zwarts' terminology, the latter weak NPIs. Eckardt and Csipak (2013) argue that minimizers are strong NPIs in the sense of Zwarts. We, however, want to claim that minimizers, while preferring (in the sense of mainly co-occurring with) strong triggers, are nonetheless to be classified as weak NPIs given the possibility of sentences such as (61).

Note, though, that minimizers differ not only from *any* or *ever* in statistical terms by showing up more frequently in negative contexts, but only by rejecting superlative contexts (cf. [56a] and [57] above). We have no ready explanation for this observation at the moment but find it significant that it holds for Azerbaijani as well as English and Dutch.

In the following table, we summarize the data that we have presented. We have distinguished cases where the minimizer is preceded by *heç* (indicated as [+heç]) to show the difference between the two types of minimizers (cf. Table 3).

Regarding the category of subjunctive clauses, it should be noted that English and Dutch no longer have a proper subjunctive. Present-day English has a clause type which is sometimes referred to as such (exemplified by e.g. *The*

Table 3: Possibility of minimizers in various contexts.

Context	Azerbaijani		English	Dutch
	[-heç]	[+heç]		
<i>As soon as</i> -clause	+	–	+	+
<i>Before</i> -clause	+	–	+	+
Comparative clause	+	–	+	+
Complement of negative predicate	+	–	+	+
Conditional clause	+	–	+	+
Few/Little	+	–	+	+
Negation	+	+	+	+
Question (yes/no, WH, direct and embedded)	+	–	+	+
Scope of <i>only/hardly</i>	+	–	+	+
Subjunctive clauses	+	–	–	–
Superlative (restriction)	–	–	–	–
<i>The first/the last/the only</i> (restriction)	+	–	+	+
<i>Without</i> -clause ¹⁵	–/ +	–	+	+

United Nations demanded that the prisoners be released), but this context does not seem to be a host for polarity items, compare:

(64) **The UN demanded that the prisoners ever be released.*

Azerbaijani subjunctive clauses may be irrealis wishes (as in 46a), but we have also found minimizers in embedded subjunctive clauses:

(65) *Azacıq ümid etmək ol-ar ki, dini təlim-in*
 tiny little hope do-INF be-AOR.3SG that religious teaching-GEN
bəlkə də qara quruş da ol-sa dəyər-i var
 perhaps also black cent even be-COND value-POSS.3SG have/there. be
 ‘It gives a little hope that religious messages have some value, even if it is not more than a red cent.’

While the majority of cases belong to negative and downward entailing contexts, we see some occurrences in non-downward-entailing non-veridical contexts as well, in particular subjunctive clauses. Such contexts have been noted by Giannakidou as important for the licensing of weak polarity items (Giannakidou

¹⁵ This category is somewhat different in Azerbaijani, cf. above in the main text for some discussion (example [47]).

1998, 2017). In the complements of irrealis predicates like *hope* and *wish*, even English may occasionally permit the occurrence of negative polarity items as the following example may illustrate:

- (66) *I wish I could ever do anything that would be what you call kind – that I could ever be of the slightest service to you.*¹⁶

We must defer a fuller discussion of such cases to another paper.

6 Conclusions

Azerbaijani employs a range of minimizing NPIs in much the same way as English or Dutch, in a broad variety of contexts, among which negation stands out as by far the most common. In this paper, we have presented an overview of the various lexical domains in which such minimizers arise, e.g. terms for small quantities, coins of low denominations, small linguistic units such as *word* or *syllable*, etc., paying attention to the kinds of predicates they typically combine with. We presented an overview of the licensing contexts for minimizers arguing that these correspond rather closely to the contexts found in the Western European languages. We did not find evidence that would suggest that minimizers have a stricter distribution than other types of NPIs (contrary to the claim put forward in Eckardt and Csipak 2013). Weak triggers such as words meaning *few* or *only* we have found to be possible for minimizers, albeit uncommon, just as they are in English or Dutch.

We made a distinction between minimizers preceded by *heç bir* ‘not a, no’ and those preceded by *bir* only. The former engage in negative concord at the clausal level while the latter do not. They may be licensed by a variety of operators including, but not restricted to, negation.

We looked at cases of minimizers accompanied by an operator *də/da* meaning ‘even’, as well as cases of minimizers without this operator, and found corpus evidence for a somewhat wider distribution for the latter.

We hope that further work on polarity in Azerbaijani will show more light on various aspects of its grammar. We argue in this paper, on the basis of polarity data, that Azerbaijani *ki*-clauses have a different status than their Turkish counterparts (corroborating the conclusions of Halpert and Griffith to appear).

For typologists working on negation, there are still numerous questions to be answered. Do all languages have negative polarity items? (There is no a priori

16 George Eliot, *Middlemarch*, Oxford University Press, Oxford, 1975 [1871], p. 239.

reason that this should be the case, yet every language studied in sufficient detail appears to have some.) And if so, do they all have minimizers? We are beginning to see some evidence that the answer to the latter question may be positive, based on our findings for Azerbaijani and a number of recent papers (cited in our references) on minimizers in non-Indo-European languages.

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Appendix List of abbreviations

1SG	1st person singular
2SG	2nd person singular
3SG	3rd person singular
1PL	1st person plural
2PL	2nd person plural
3PL	3rd person plural
AGR	agreement marker (on nouns)
POSS1	1st person possessive
POSS2	2nd person possessive
POSS3	3rd person possessive
ABL	ablative case
ACC	accusative case
AOR	aorist tense
COND	conditional mood
CV	converb
DAT	dative case
FUT	future tense
GEN	genitive case
GER	gerund
IMP	imperative mood
JOIN	joining morpheme
LOC	locative case
NEG	negation
PASS	passive voice
PAST	past tense
PL	plural
POT	potential mood
PP	past participle
PRES	present tense
SUBJ	subjunctive mood

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